



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/437,296

11/09/1999

MICHIO YAMAJI

991283

7789

23850 7590 02/09/2012  
KRATZ, QUINTOS & HANSON, LLP  
1420 K Street, N.W.  
4th Floor  
WASHINGTON, DC 20005

EXAMINER

DUNWOODY, AARON M

ART UNIT

PAPER NUMBER

3679

MAIL DATE

DELIVERY MODE

02/09/2012

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

*Ex parte* MICHIO YAMAJI, TSUTOMU SHINOHARA, and  
NOBUKAZU IKEDA

---

Appeal 2010-003644  
Application 09/437,296  
Technology Center 3600

---

Before PHILLIP J. KAUFFMAN, MICHAEL L. HOELTER, and  
JAMES P. CALVE, *Administrative Patent Judges*.

CALVE, *Administrative Patent Judge*.

DECISION ON APPEAL

## STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134 from the decision of the Examiner rejecting claim 1 under 35 U.S.C. § 103(a) as unpatentable over Nakazawa (US 5,967,489; iss. Oct. 19, 1999) and Eidsmore (US 5,085,935; iss. Oct. 22, 1991). We have jurisdiction under 35 U.S.C. § 6.

We REVERSE.

## THE INVENTION

Claim 1 illustrates the claimed subject matter on appeal:

1. A fluid coupling comprising:  
first and second coupling members having respective gasket holding annular ridges on butting end faces thereof;  
and  
an annular gasket interposed between the first and second coupling members,  
wherein at least one of the first and second coupling members has a fluid channel comprising an opening passageway orthogonal to the butting end face thereof, and a slanting main passageway communicating therewith, the opening passageway having a diameter equal to the inside diameter of the gasket holding annular ridge,  
wherein the gasket holding annular ridges are rounded so as to be in contact with flat, non-inclined faces of the gasket only at its radial midportion so as to relieve the inner peripheral portion of the gasket from stress concentration and wrinkles and,  
*wherein the gasket has an inside diameter less than the diameter of the opening passageway.*

## ANALYSIS

The Examiner found that Nakazawa discloses a fluid coupling with an annular gasket interposed between first and second coupling members and annular gasket holding ridges that contact the gasket at its radial midportion as called for in claim 1. Ans. 3-4. The Examiner also found that Eidsmore

discloses a rounded gasket holding annular ridge 40 that contacts flat, non-inclined faces of a gasket 42 at a radial midpoint and determined it would have been obvious to round Nakazawa's gasket holding ridges to contact flat, non-inclined faces of the gasket only at its radial midpoint, as taught by Eidsmore, as the arrangement is conventional and well known (Ans. 4-5). The Examiner further found that applying increased pressure to Nakazawa's gasket via rounded gasket holding ridges would cause Nakazawa's gasket to expand radially outward and inward, even if just a slight amount, beyond the inside diameter of the opening passageway so that the inside diameter of the gasket would be less than the diameter of the opening passageway as called for in claim 1. Supp. Ans. 3-4.

The Examiner has not shown by a preponderance of evidence that applying increased pressure through rounded gasket holding ridges, as disclosed by Eidsmore<sup>1</sup>, would necessarily cause Nakazawa's gasket 18<sup>2</sup> to expand radially inward. *See* Reply Br. 2-3. The Examiner has not made any findings as to the composition of Nakazawa's gasket 18. Further, Nakazawa's coupling members (controller 9, valves 33, 34) abut at slanted faces 9a/36c, 10a, 37c (col. 10, ll. 38-44; figs. 2, 5, 6) that appear to prevent the gasket holding ridges from moving any closer together to cause radial expansion of gasket 18. This arrangement assures proper tightening by pressing members 22, 53 (col. 11, ll. 39-40) and obviates the problem of displacement of gasket portions (col. 11, ll. 9-13).

---

<sup>1</sup> Eidsmore's rounded protrusions 40 contact side faces of a flat *metal* gasket 42 in a well-known, conventional arrangement that does not appear to cause radial expansion of the gasket. Col. 4, ll. 21-26.

<sup>2</sup> Nakazawa's gasket 18 is of common construction and not shown in detail. *See* Nakazawa, col. 4, l. 23.

Appeal 2010-003644  
Application 09/437,296

As such, we cannot sustain the rejection of claim 1.

DECISION

The Examiner's decision to reject claim 1 is REVERSED.

REVERSED

mls